

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method managing a management activity of at least one managed object by at least one manager object through a communication network, the method comprising the following steps:

– providing ~~at least one~~ a plurality of intermediate objects configured to manage said at least one managed object according to a data set, said management activity being transformed into a set of results,

– receiving, at said ~~at least one~~ plurality of intermediate objects, said data set from said at least one manager object,

– concurrently managing said at least one managed object through said ~~at least one~~ plurality of intermediate objects, to generate said set of results, and

– transferring said set of results from said ~~at least one~~ plurality of intermediate objects to said at least one manager object,

~~– managing at least one further managed object directly through said at least one manager object, and~~

~~– managing said at least one managed object by said at least one manager object via said intermediate object,~~

~~wherein the management of said at least one further managed object and said at least one managed object occurs only through a single communication network.~~

2. (Currently Amended) The method according to claim 1 which comprises the step of establishing ~~the~~ communication between said at least one manager object and at least one of said ~~at least one~~ plurality of intermediate objects via UDP protocol.

3-4. (Canceled)

5. (Currently Amended) The method according to claim 1 which comprises the following steps:

–managing ~~said~~ at least one further managed object directly through said at least one manager object and transferring said data set and said results set between said at least one manager object and said at least one further managed object, ~~and~~  
–~~managing said at least one managed object through said intermediate object.~~

6. (Canceled)

7. (Currently Amended) The method according to claim 1 wherein at least one of said plurality of intermediate objects is provided with respective reception modules and transmission modules configured so that said at least one manager object sees said at least one of said plurality of intermediate objects as ~~one of said~~ managed ~~objects~~object.

8. (Currently Amended) The method according to claim 1 wherein at least one of said ~~at least plurality one of~~ intermediate objects comprises at least one respective management module configured so that said at least one managed object, which is managed by said at least one of said plurality of intermediate objects, sees said at least one of said plurality of intermediate objects as said at least one manager object.

9. (Currently Amended) The method according to claim 1 wherein at least one of said ~~at least one plurality of intermediate object~~objects is provided with one of the following queues:

– an input queue for collecting input messages with respect to said at least one of said plurality of intermediate object~~objects~~,

– an output queue for collecting output messages from said at least one of said plurality of intermediate objects, and

– a working queue for collecting messages inherent to said management activity performed by said at least one of said plurality of intermediate object~~objects~~ on said at least one managed object.

10. (Currently Amended) The method according to claim 9 which comprises the step of providing, in said at least one of said plurality of intermediate ~~object~~objects, a dedicated module for analyzing the input messages received by said input queue.

11. (Currently Amended) The method according to claim 10 which comprises the following steps:

– providing, in said at least one of said plurality of intermediate ~~object~~objects, an activity co-ordinating module for implementing at least one of the following functions:

- instantiating at least one concurrent process,
- updating activity status of the requests in said working queue, and
- creating statistic check messages to be sent to said at least one manager object through said output queue.

12. (Currently Amended) The method according to claim 9 which comprises the step of providing a plurality of protocol management modules configured to establish communication to said at least one managed object through respective different protocols in said at least one of said plurality of intermediate ~~object~~objects.

13. (Currently Amended) The method according to claim 9 which comprises the step of establishing ~~the~~ communication between said at least one manager object and said at least one of said plurality of intermediate ~~object~~objects by subjecting at least one part of the respective messages to a compression operation.

14. (Currently Amended) The method according to claim 13 wherein said compression operation is based on ~~the~~ an acknowledgment of a sequence which appears periodically in the at least one part of the respective messages.

15. (Previously Presented) The method according to claim 14 wherein said compression operation implements a gzip type method.

16. (Previously Presented) The method according to claim 2 which comprises the step of indicating that compression of the message transferred by UDP is done.

17. (Previously Presented) The method according to claim 16 wherein a bit field in the UDP header is used to indicate that the compression operation is done.

18. (Previously Presented) The method according to claim 17 wherein bits comprised in the range from bit 62 to bit 69 in the UDP header are used in indicate that the compression operation is done.

19. (Previously Presented) The method according to claim 18 which comprises the step of setting at least one of the bits from 62 to 69 of the UDP message header to 1.

20. (Currently Amended) The method according to claim 13 wherein the communication between said at least one manager object and said at least one of said plurality of intermediate object-objects is implemented by means of SNMP messages, and comprises the following steps during the compression step:

- reading the entire SNMP message,
- encoding the read message in hexadecimal format, and
- subjecting the message encoded in hexadecimal format to compression.

21. (Currently Amended) The method according to claim 13 wherein communication between said at least one manager object and said at least one of said plurality of intermediate object-objects is implemented by means of SNMP messages, comprises the following steps during the reception step:

- subjecting the received message to decompression complementary to said compression operation, to obtain a message subjected to decoding in hexadecimal format,
- decoding the message from the hexadecimal format, and

- reconstructing the entire SNMP message from said decoded message.

22. (Currently Amended) The method according to claim 21 which comprises a nesting operation in a standard SNMP message for ~~the~~ transmission of the message subjected to said compression operation.

23. (Currently Amended) The method according to claim 22 which comprises the following steps during transmission:

- reading the message subjected to said compression operation in bytes and transposing it into a corresponding ASCII character message,
- generating a variable binding set comprising a first OID indicating an original file size and subsequent OID/value pairs which carry portions of said message subjected to said compression operation transposed into ASCII characters,
- reconstructing SNMP message header data,
- encoding the resulting SNMP message in hexadecimal format to generate ~~the a~~ a UDP payload, and transferring the generated UDP payload ~~generated in this way~~.

24. (Currently Amended) The method according to claim 23 which comprises the following steps during reception:

- receiving the message subjected to said compression operation as ~~an a~~ a UDP payload,
- subjecting the received UDP payload ~~received in this way~~ to a hexadecimal decoding operation,
- acknowledging and assembling the variable binding of the message subjected to hexadecimal decoding,
- subjecting the message subjected to said acknowledging and assembling operation to binary ASCII decoding, and
- subjecting the decoded message in binary form to said decompression operation.

25. (Previously Presented) The method according to claim 21 which comprises the step of integrating the message subjected to said compression operation through UDP nesting for the transmission of the message subjected to said compression operation.

26. (Currently Amended) The method according to claim 25 which comprises the following steps during transmission:

- configuring said message subjected to said compression operation as a Protocol Data Unit (PDU) payload, and
- transferring the PDU payload ~~created in this way~~ to a ~~given~~ receiver port.

27. (Currently Amended) The method according to claim 26 which comprises the following steps during reception:

- receiving said message as a payload of a PDU UDP received at a ~~receiver~~ reception port, and
- extracting said payload from said PDU.

28. (Currently Amended) The method according to claim 27 ~~which comprises~~ comprising the step of:

- transmitting a synchronisation message of the SNMP type indicating at least one of ~~said a~~ transmission port and said reception port between said at least one manager object and said at least one of said plurality of intermediate ~~object~~ objects.

29. (Currently Amended) A system for managing communication networks comprising:

- at least one manager object; ~~and~~
- at least one managed object, which comprises at least one intermediate object; and
- a plurality of intermediate objects configured to:
  - receive a data set from said at least one manager object,
  - concurrently manage said at least one managed object according to said data set,

- generate a set of results by said managing of said at least one managed object,  
and  
- transfer said set of results to said at least one manager object  
~~implementing the method according to claim 1.~~

30. (Currently Amended) A computer-readable medium storing instructions that, when executed by a processor, performs:

~~- managing at an a plurality of intermediate object objects~~ at least one managed object according to a data set, said managing being transformed into a set of results,  
~~- receiving, at said at least one plurality of intermediate objects,~~ said data set from said at least one manager object,  
~~- concurrently managing said at least one managed object through said at least one plurality of intermediate object objects,~~ to generate said set of results, and  
~~- transferring said set of results from said at least one plurality of intermediate object objects to said at least one manager object;~~  
~~- managing at least one further managed object directly through said at least one manager object, and~~  
~~- managing said at least one managed object by said at least one manager object via said intermediate object,~~  
~~wherein the management of said at least one further managed object and said at least one managed object occurs only through a single communication network.~~

31. (Previously Presented) The method according to claim 14, wherein a compressed message is generated responsive to the acknowledgment of a sequence which appears periodically in the at least one part of the respective messages prior to compression.